ABSTRACT OF THE DISCLOSURE

Tools for resecting tibia and femur include anchoring devices, a three-way alignment guide attachable to the anchoring devices, two embodiments of a resection guide attachable to the alignment guide and equipped with couplings for trackers, a plane probe for examining the resected plane, and apparatus for EM alignment of the resection guide in the event of a computer failure. The methods of the invention include operating a computer aided navigation apparatus in the conventional manner including attaching one or more trackers to the bone to be resected; choosing a location for the anchoring device with or without guidance from the computer and installing the anchoring device; attaching the three-way alignment guide to the anchoring device; attaching a resection guide to the alignment guide; attaching one or two trackers to the resection guide; locating the resection guide with the aid of the alignment guide and the computer; fixing the resection guide to the bone with pins. After the bone is resected, the resection plane probe may be attached to a tracker and moved about the resected plane to obtain feedback from the computer navigation system. In the event of computer failure, the methods include attaching the EM alignment guide to the resection guide; attaching the EM rod to the EM alignment guide; and locating the resection guide by visual location of the EM rod rather than by feedback from the computer navigation system.